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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,557	03/23/2004	Albert H. M. Reinhardt	073338.0186 (04-50460 FLA	4267
5073	7590	03/22/2007	EXAMINER	
BAKER BOTTS L.L.P. 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980			LIANG, REGINA	
			ART UNIT	PAPER NUMBER
			2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/22/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/807,557

Applicant(s)

REINHARDT ET AL.

Examiner

Regina Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/23/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to amendment filed 1/25/07. Claims 1-21 are pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1-5, 9-12, 15-18, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaplan (US 2002/0093483).

As to claims 1 and 21, Kaplan discloses a motion controlled handheld device (100 in Fig. 1) comprising a display having a viewable surface and operable to generate a current image; a motion detection module (10, 11) operable to detect motion of the device within three dimensions and to identify components of the motion in relation to the viewable surface (move or rotate the device 100 about x, y and/or z directions corresponding to components of motion), the components comprising a first component (about z direction) parallel to the viewable surface, a second component (about x direction) paralleled to the viewable surface and perpendicular to the first component, and a third component (about y direction) perpendicular to the viewable surface; and a display control module (17 in Fig. 5 for example) operable to display a cursor (pointer 120 in Fig. 1) on the viewable surface, to determine a translation vector (Figs. 3, 4) that is substantially opposite to the sum of the first component and the second component, and to translate the cursor across the viewable surface according to the translation vector in order to substantially maintain the position of the cursor in space with respect to the viewable surface

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(see sections [0014] and [0017] in which "rotation of PDA 100 about the z axis by an angle α in the counter clockwise direction moves cursor 120 to the right on display 110").

As to claim 2, Kaplan teaches the handheld device having buttons (12-14) for selecting cursor movement or displayed image movement ([0010])

As to claim 3, Kaplan teaches the cursor is frozen when activating a button 14 or a combination of buttons 13 and 14.

As to claims 4, 5, Kaplan teaches the sensitivity gain factor for the movement of cursor is adjustable ([0017]-[0019]), which reads on reduce a magnitude of the translation vector to maintain the cursor within the viewable surface (fine cursor movement would maintain the cursor within the display screen).

Claims 9-12, 15-18, which are method claims corresponding to the above apparatus claims 1-4, are rejected for the same reasons as stated above since such method "steps" are clearly read on by the corresponding "means".

Claim Rejections - 35 USC § 103

4. Claims 6, 13, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan in view of Orchard (US 6,834,249).

Kaplan does not explicitly disclose the display control module is operable to detect a value of the third component exceeding a threshold, and in response to the detection, to perform an operation. However, Orchard teaches a handheld device having motion detection sensors for sensing the motion of the device, in response to the sensor reaches a motion threshold, the motion control agent generates instructions or operations to update the current state of the device

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(col. 4, lines 34-39, col. 7, lines 16-28, 46-65 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Kaplan to have the feature as taught by Orchard so as to provide a simple way to control the display of content generated within an application and to eliminate the switches.

5. Claims 14, 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan in view of Feinstein (US 2002/0190947) and Bartlett (US 6,573,883).

Kaplan does not use first to third accelerometers to the motion of device along a first to third axis. However, Fig. 14 of Feinstein teaches a handheld device using first to third accelerometer for detecting the motion of the device along x, y and z axis ([0087]). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the handheld device of Kaplan to use three accelerometers as taught by Feinstein since the three accelerometers measure the acceleration of the device along three independent directions precisely.

Kaplan as modified by Feinstein teaches the device have a plurality of gestures, each gesture defined by a motion of the device with respect to a first position of the device using the accelerations. Kaplan as modified by Feinstein does not explicitly disclose a gesture database. However, Bartlett teaches a handheld device having a gestures database (catalog of gesture commands), a match between the submitted gesture and a gesture command in the catalog serves to identify the submitted gesture command, the gesture command is processed to control the computing device (col. 4, lines 46-65). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the handheld device of Kaplan as

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modified by Feinstein to have a gesture database as taught by Bartlett so as to provide a finger-free operation of electronic device and to extend the range of commands available for control of a computing device (col. 2, lines 43-49 of Bartlett).

Allowable Subject Matter

6. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 1/25/07 have been fully considered but they are not persuasive.

Applicant's argument regarding claim 1 in that there is no disclosure in Kaplan of identifying first and second components of motion, both parallel to the viewing surface, and determining a translation vector substantially opposite to the sum of the first and second components of motion, are not persuasive. Fig. 1 of Kaplan shows the display viewing surface is on the x-z plane, detecting the motion of the device in z direction corresponds to identify the first component of the motion, detecting the motion of the device in x direction corresponds to identify the second component of the motion, since the display viewing surface is on the x-z plane so the first component of motion of Kaplan is parallel to the viewing surface, the second component of motion is parallel to the viewing surface. Figs. 3 and 4 of Kaplan also teaches to determine the cursor position by determining the vectors in x-y, x-z, y-z plane, and to calculate the rotation angles using the vectors, wherein the rotation of PDA about the z axis by an angle as

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in the counter clockwise direction moves cursor to the right on display, this reads on determine a translation vector that is substantially opposite to the sum of the first component and the second component as claimed.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Regina Liang
Primary Examiner
Art Unit 2674

3/19/07